

*Education panel focuses on strengthening S.J. students' exposure, resources for tech fields*

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STOCKTON - It was statistic after statistic about educational failures in the United States that had more than 60 audience members nodding their heads in disapproval.

It was a grim comparison of high American Olympic standards to low American educational standards that had the audience grunting in disappointment.

However, the biggest concern Tuesday among audience members and panelists at the Roundtable on Science, Technology, Engineering and Math Education:

Lack of resources for San Joaquin County students.

"Our students in San Joaquin County have a lot of potential," said Rep. Jerry McNerney, D-Pleasanton, the host and moderator of the panel. "But sometimes they don't have all the resources they need."

The panel at Stagg High School's auditorium addressed the importance of strengthening science and math programs at all levels of education. Panelists ranged from Rep. Eddie Bernice Johnson, D-Texas, to Stagg High's mathematics teacher and department chair Andrew Walter.

Christopher Young, director of operations at California-based Community Fuels, said that as a green-energy company there is a larger problem that needs to be addressed at the educational level - real world preparedness for careers in science, math and technology.

Young said that there is a discrepancy between University of California, Davis, and University of the Pacific graduates. He said UC Davis students tend to have more experience working in labs.

"We have a hard time finding the right people, the right engineers, the right scientists for the

jobs we have," Young said.

Steve Lowder, panelist and new superintendent of Stockton Unified School District, said that preparedness for potential science and math careers can and should start at the grade-school level.

"The thing I think about is early exposure to science," Lowder said. He credits an upcoming program, Spatial Temporal Math, as a program that will expose young children to math concepts.

He said Spatial Temporal Math will prepare students with skills that can help them succeed in higher-level courses as they go through grade school and into potential careers.

One program that was used as an example of success and credited with continually preparing students is the Math, Engineering, Science Achievement program at Pacific. This year, Stagg High's team took first place at the national Math, Engineering, Science Achievement competition in the wind-energy challenge.

Team members presented their project to the panel.

"They gave these students balsawood and duct tape and they won nationals. They're genius," said Maria Garcia-Sheets, Pacific's director of the program.

Over the past year, the program has grown by at least 50 percent in the Lodi, Stockton and Manteca areas. It now serves 2,200 students. Garcia-Sheets predicted the program will grow by at least 500 more students this year. She said lack of resources poses the biggest challenge.

"I wouldn't say students are lacking skills," Garcia-Sheets said. "Particularly in our area children are lacking resources."

Panelist Kirk Brown, the new director of science and special projects at the San Joaquin County Office of Education, said it also is important to create relationships in the field of science and technology.

One hour after the roundtable, Brown hosted a luncheon at the county Office of Education's Wentworth Education Center that involved 24 Japanese students from Mito Second Senior High School, a designated "super science" high school focusing on math and science in Ibaraki Prefecture, Japan.

The group of Japanese high school girls toured Tracy High School, learned about educational models in San Joaquin County and about biotechnology with an emphasis on animal biology and genetically modified goats from UC Davis graduate and Tracy High alum, Asha Miles.

Brown said the Stagg High roundtable and Japanese visitors were not planned for the same day. "It was just a coincidence," Brown said. "But it was a great opportunity to show what we need to be doing with building international relationships for the math and sciences."

